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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,125

04/27/2006

Charles Watkinson

9052-223

8967

20792 7590 04/29/2008
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EXAMINER

SZEWCZYK, CYNTHIA

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

04/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,125	Applicant(s) WATKINSON, CHARLES	
	Examiner CYNTHIA SZEWCZYK	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/15/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial office action for WATKINSON application no. 10/539,125 filed June 15, 2005 which is a national stage entry of PCT/GB02/05794.
2. Claims 1-6 are currently pending and have been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JENSEN (US 4,344,785).

JENSEN discloses a modular molten glass column for forming glass fibers (abstract). JENSEN discloses that molten glass is fed from a forehearth (col. 4, lines 12-13) (means for producing heated stream of instant claim 1). Figure 1 shows that the molten stream is fed substantially downward. The conduits (12) receive the molten

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stream of glass (means for receiving of instant claim 1). The column includes a high pressure glass fiber forming bushing (16 in figure 1) (forming fibers of instant claim 1).

The apparatus of JENSEN teaches the method of instant claim 5. The flow rate of glass is controlled by the viscosity of the stream, which is in turn controlled by the temperature of the melt. JENSEN discloses that the column contains temperature control elements, which in turn would control the flow rate of the molten glass as in instant claims 4 and 6. The column also includes a heating device (50 in figure 2) that is composed of electrical heating elements (col. 5, lines 27-28) (means for effecting change in temperature of instant claim 1). Although the heating device does not directly heat the molten glass stream, it would have been obvious to one of ordinary skill in the art that directly heating the glass would be a known technical alternative. Therefore, the claimed invention would have been obvious.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JENSEN (US 4,344,785) as applied to claims 1, and 4-9 above, and further in view of MCCAGUE (US 4,713,106).

JENSEN discloses a modular molten glass column for forming glass fibers (abstract). JENSEN fails to disclose a means for cooling prior to the stream being fed in a downward direction. MCCAGUE discloses a method and apparatus for conveying molten material. MCCAGUE discloses that the apparatus is provided with cooling means to adjust the temperature of the molten material and throttle the flow through the fitting (col. 2, lines 47-50). The cooling means are equipped with a cooling fluid flowing

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through a conduit (col. 2, lines 51-52) as in instant claim 3. Figures 1 and 5 of MCCAGUE show that the cooling means is located prior to the stream being fed in a downward direction. It would have been obvious to use the cooling means of MCCAGUE in the molten glass column of JENSEN because it would result in better flow control of the molten glass as suggested by MCCAGUE. Therefore, the claimed invention would have been obvious.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA SZEWCZYK whose telephone number is (571)270-5130. The examiner can normally be reached on Monday through Thursday 7:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/
Supervisory Patent Examiner, Art
Unit 1791

CS